



Categorical Exclusion Form

Project: Soda Butte Creek Native Fish Restoration Project

PEPC Project Number: 58279

Project Description:

A parkwide Native Fish Conservation Plan was prepared in December 2010. The plan was needed to curtail on-going losses in native fish populations and resultant impacts to the natural food webs they support. Across the park, changing precipitation patterns combined with the lingering effects of historical and illegal stocking of non-native fish continue to result in shifts in ecosystem function. Now, by removing the non-native fish and other non-natural components of the ecosystem, the NPS will strive to restore natural ecosystem components that have been lost or degraded.

Yellowstone NP has been working with partner agencies (Montana Fish, Wildlife, and Parks; U.S. Forest Service; and Wyoming Game and Fish) to remove brook trout from Soda Butte Creek for the past two decades. Brook trout removal has been done by electrofishing the upper portions of Soda Butte Creek, above Ice Box Canyon and selectively removing brook trout while returning cutthroat trout back to the stream. Removal of brook trout in Soda Butte Creek by electrofishing was our proposed conservation action described in our Native Fish Conservation Plan EA. Electrofishing is both labor intensive and costly. After two decades of removal effort, brook trout continue to expand their range downstream in Soda Butte Creek.

To curtail further expansion of brook trout in Soda Butte Creek, the objective is to remove brook trout by applying a piscicide (rotenone) to remove brook trout from upper portions of the creek above Ice Box Canyon. After treatment, genetically pure Yellowstone cutthroat trout would be stocked into the stream in an effort to secure the population into the future. Yellowstone NP proposes to work with partner agencies including Montana Fish Wildlife and Parks, U.S. Forest Service, and Wyoming Game and Fish to remove brook trout from the upper reaches of Soda Butte Creek. Montana Fish Wildlife and Parks is currently developing an Environmental Assessment through their Montana Environmental Policy Act (MEPA) process.

This project is located in the reaches of Soda Butte Creek and includes all areas of Soda Butte Creek and tributaries above Ice Box Canyon as well as two miles below Ice Box Canyon. An approved piscicide would be used to remove all fish above Ice Box Canyon. Piscicide application would take place during late summer and cover the entire watershed above Ice Box Canyon. Dilute rotenone would be applied via drip stations, backpack sprayers, and a mixture of powdered rotenone and sand. A detox station would be staged upstream of Ice Box Canyon. Potassium permanganate would be used to detoxify the piscicide. Potassium permanganate would temporarily turn the stream a deep purple color.

It is anticipated that up to two miles of stream below Ice Box Canyon would be affected by the treatment. It is anticipated that several years of treatment (2-4 yrs) may be necessary to completely eradicate brook trout from upper Soda Butte Creek.

Approximately 15 staff from Yellowstone NP and an additional 15 staff from our partner agencies would be involved in the application and detoxification of rotenone in upper Soda Butte Creek.

Details regarding rotenone application and detoxification procedures and analysis of impacts are provided in the Native Fish Conservation Plan/EA. While Soda Butte Creek was not specifically mentioned as a piscicide project the actions described above meet the criteria developed for inclusion under the adaptive management framework for this plan. No wetland statement of findings is required as this project would qualify for an excepted action under "actions designed to restore degraded (or completely lost) wetland, stream, riparian, or other aquatic habitats or ecological process. For this exception "restoration" refers to re-establishing environments in which natural ecological processes can, to the extent practicable, function as they did prior to disturbance."

In response to public scoping, and the concern by the public of removing native Yellowstone cutthroat trout that are genetically pure (greater than 99%), Yellowstone National Park and Montana Fish, Wildlife, & Parks have modified both proposals to include electroshocking of Soda Butte Creek to remove cutthroat trout prior to rotenone treatment(s). The salvaged cutthroat trout will be held within the Soda Butte Creek watershed, in tanks and/or within upper untreated tributaries, and returned to Soda Butte Creek in the areas of Cooke City and Silver Gate following the rotenone treatment(s).

Project Locations:

Location

County:	Park	State:	WY
District:		Section:	
Geo. Marker:		Other:	

Mitigation(s):

- Mitigating the impacts to non-target organisms would also be accomplished by collecting and disposing of as many fish carcasses as possible immediately following treatment to avoid attraction of bears and other animals to the project area.
- The project lead will ensure that all project-related employees, such as contract employees, would be given orientation on how to avoid disturbing or encountering bears and how to minimize unavoidable effects or encounters. Orientation would include information about park regulations regarding food storage, disposal of garbage and other bear attractants, and approaching or harassing wildlife.
- Ensure work crews adhere to bear safety and food storage regulations.
- If any cultural materials are discovered during construction, work in the area shall halt immediately, the National Park Service must be contacted, and the materials evaluated by an archeologist or historian meeting the Secretary of the Interior's Professional Qualification Standards (48 FR 22716, Sept. 1983). Call Tobin Roop (344-2224), Staffan Peterson (344-2290), or Robin Park (344-2155) for assistance.
- Please contact your compliance representative if the scope of work changes to ensure proper compliance documentation has been completed. Upon project completion, please send a written summary, with photos if possible, to close out the administrative record for your project.
- Please adhere to the following mitigation measures as listed in the Native Fish Conservation Plan under section 2.7.4 Use of Piscicides: 1) Mitigating the effects of piscicide on human health and safety would be ensured by strict adherence to all label guidelines and other applicable state, federal, local, and agency regulations pertaining to application, handling, storage, and transportation. 2) Each project that requires piscicide use would be managed by a certified piscicide applicator. 3) Risks from piscicides to the public would be mitigated using public awareness through press releases prior to project initiation and signage (placards) in and around the project area (trailheads, as well as information available at backcountry offices). In some cases the public would be temporarily restricted from entering the project area, particularly treated waters, during and after the treatment. 4) Actions that would take place in backcountry and recommended wilderness areas would adhere to Yellowstone National Park's Minimum Requirement Policy. Approval of a Minimum Requirement Analysis would be required for each action that requires structures, flight landings, or mechanized equipment in recommended wilderness areas. 5)

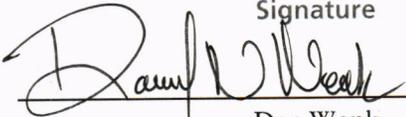
Methods to mitigate piscicide use include: lowering piscicide concentration while still achieving complete eradication and adjusting treatment timing to avoid harming juvenile amphibians. 6) Survey work would be completed prior to piscicide application to establish the distribution of target and non-target fish and presence of fishless water so that waters can be left untreated if treatment is not required. 7) Mitigating the impacts to non-target organisms would also be accomplished by minimizing treatment concentration and duration as well as collecting and disposing of as many fish carcasses as possible immediately following treatment to avoid their consumption by bears and other animals.

Describe the category used to exclude action from further NEPA analysis and indicate the number of the category (see Section 3-4 of DO-12):

B.1 Changes or amendments to an approved plan, when such changes would cause no or only minimal environmental impact.

Explanation:

On the basis of the environmental impact information in the statutory compliance file, with which I am familiar, I am categorically excluding the described project from further NEPA analysis. No exceptional circumstances (e.g. all boxes in the ESF are marked "no") or conditions in Section 3-6 apply, and the action is fully described in Section 3-4 of DO-12.

Signature
Superintendent:  Date: 7/16/2015
Dan Wenk

NPS Contact:  Date: 7/15/15



ENVIRONMENTAL SCREENING FORM (ESF)

DO-12 APPENDIX 1

Date Form Initiated: 04/21/2015

Updated May 2007 - per 2004 Departmental Manual revisions and proposed Director's Order 12 changes

A. PROJECT INFORMATION

Park Name: Yellowstone National Park
 Project Title: Soda Butte Creek Native Fish Restoration Project
 PEPC Project Number: 58279
 PMIS Number:
 Project Type: Restoration (REST)
 Project Location:
 County, State: Park, Wyoming
 Project Leader: Todd Koel
 Administrative Record Location: YCR Compliance Files
 Administrative Record Contact: Bianca Klein
 Notes:

B. PROJECT DESCRIPTION

See Categorical Exclusion Document for full project description.

Target compliance completion date: Late August

Is project a hot topic (controversial or sensitive issues that should be brought to attention of Regional Director)? No

C. RESOURCE EFFECTS TO CONSIDER:

Identify potential effects to the following physical, natural, or cultural resources	No Effect	Negligible Effects	Minor Effects	Exceeds Minor Effects	Data Needed to Determine/Notes
1. Geologic resources – soils, bedrock, streambeds, etc.		Negligible			Negligible, short-term adverse impacts will occur with temporary placement of equipment on stream banks.
2. From geohazards	No				

3. Air quality	No				
4. Soundscapes	No				
5. Water quality or quantity			Minor		Minor, short-term adverse impacts will occur to water quality during piscicide treatment. The treatment is expected to discolor the water a purple color for 3 – 5 days. Additional days may occur if re-treatment is necessary.
6. Streamflow characteristics	No				
7. Marine or estuarine resources	No				
8. Floodplains or wetlands		Negligible			Negligible, short-term adverse impacts will occur to wetlands by staff trampling while working along the river's edge.
9. Land use, including occupancy, income, values, ownership, type of use	No				
10. Rare or unusual vegetation – old growth timber, riparian, alpine	No				
11. Species of special concern (plant or animal; state or federal listed or proposed for listing) or their habitat	No				
12. Unique ecosystems, biosphere reserves, World Heritage Sites	No				
13. Unique or important wildlife or wildlife habitat	No				
14. Unique or important fish or fish habitat			Minor		Minor beneficial impacts will occur to important fish or fish habitat as a result of this project.

15. Introduce or promote non-native species (plant or animal)	No				
16. Recreation resources, including supply, demand, visitation, activities, etc.			Minor		Minor, short-term adverse impacts will occur to fishing activities due to closures of the stream to fishing while treatments are applied.
17. Visitor experience, aesthetic resources			Minor		Minor, short-term adverse impacts will occur to visitor experience due to closures of the stream to fishing while treatments are applied.
18. Archeological resources	No				
19. Prehistoric/historic structure	No				
20. Cultural landscapes	No				
21. Ethnographic resources	No				
22. Museum collections (objects, specimens, and archival and manuscript collections)	No				
23. Socioeconomics, including employment, occupation, income changes, tax base, infrastructure	No				
24. Minority and low income populations, ethnography, size, migration patterns, etc.	No				
25. Energy resources	No				
26. Other agency or tribal land use plans or policies	No				

27. Resource, including energy, conservation potential, sustainability	No				
28. Urban quality, gateway communities, etc.	No				
29. Long-term management of resources or land/resource productivity	No				
30. Other important environment resources (e.g. geothermal, paleontological resources)?	No				

D. MANDATORY CRITERIA

Mandatory Criteria: If implemented, would the proposal:	Yes	No	N/A	Comment or Data Needed to Determine
A. Have significant impacts on public health or safety?		N		
B. Have significant impacts on such natural resources and unique geographic characteristics as historic or cultural resources; park, recreation, or refuge lands; wilderness areas; wild or scenic rivers; national natural landmarks; sole or principal drinking water aquifers; prime farmlands; wetlands (Executive Order 11990); floodplains (Executive Order 11988); national monuments; migratory birds; and other ecologically significant or critical areas?		N		
C. Have highly controversial environmental effects or involve unresolved conflicts concerning alternative uses of available resources (NEPA section 102(2)(E))?		N		
D. Have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks?		N		

E. Establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects?		N		
F. Have a direct relationship to other actions with individually insignificant, but cumulatively significant, environmental effects?		N		
G. Have significant impacts on properties listed or eligible for listing on the National Register of Historic Places, as determined by either the bureau or office?		N		
H. Have significant impacts on species listed or proposed to be listed on the List of Endangered or Threatened Species, or have significant impacts on designated Critical Habitat for these species?		N		
I. Violate a federal law, or a state, local, or tribal law or requirement imposed for the protection of the environment?		N		
J. Have a disproportionately high and adverse effect on low income or minority populations (Executive Order 12898)?		N		
K. Limit access to and ceremonial use of Indian sacred sites on federal lands by Indian religious practitioners or significantly adversely affect the physical integrity of such sacred sites (Executive Order 13007)?		N		
L. Contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area or actions that may promote the introduction, growth, or expansion of the range of such species (Federal Noxious Weed Control Act and Executive Order 13112)?		N		

For the purpose of interpreting these procedures within the NPS, any action that has the potential to violate the NPS Organic Act by impairing park resources or values would constitute an action that triggers the DOI exception for actions that threaten to violate a federal law for protection of the environment.

E. OTHER INFORMATION

1. Are personnel preparing this form familiar with the site? Yes

1.A. Did personnel conduct a site visit? No

2. Is the project in an approved plan such as a General Management Plan or an Implementation Plan with an accompanying NEPA document? Yes
- 2.A. If so, plan name: Native Fish Conservation Plan
Plan Project ID: 30504
- 2.B. Is the project still consistent with the approved plan? Yes
- 2.C. Is the environmental document accurate and up-to-date?
FONSI: Yes ROD: No Date approved: 05/18/2011
3. Are there any interested or affected agencies or parties? Yes
- 3.A. Did you make a diligent effort to contact them? Yes
4. Has consultation with all affected agencies or tribes been completed? N/A
5. Are there any connected, cumulative, or similar actions as part of the proposed action?
(e.g., other development projects in area or identified in GMP, adequate/available utilities to accomplish project) No

F. INSTRUCTIONS FOR DETERMINING APPROPRIATE NEPA PATHWAY

First, always check DO-12, section 3.2, "Process to Follow" in determining whether the action is categorically excluded from additional NEPA analyses. Other sections within DO-12, including sections 2.9 and 2.10; 3.5; 4.5(G)(4) and (G)(5), and 5.4(F), should also be consulted in determining the appropriate NEPA pathway. Complete the following tasks: conduct a site visit or ensure that staff is familiar with the site's specifics; consult with affected agencies, and/or tribes; and interested public and complete this environmental screening form.

If your action is described in DO-12 section 3.3, "CEs for Which No Formal Documentation is Necessary," follow the instructions indicated in that section.

If your action is not described in DO-12, section 3.3, and IS described in section 3.4, AND you checked YES or identified "data needed to determine" impacts in any block in section D (Mandatory Criteria), this is an indication that there is potential for significant impacts to the human environment, therefore, you must prepare an EA or EIS or supply missing information to determine context, duration, and intensity of impacts.

If your action is described in section 3.4 and NO is checked for all boxes in section D (Mandatory Criteria), AND there are either no effects or all of the potential effects identified in section C (Resource Effects to Consider) are no more than minor intensity, usually there is no potential for significant impacts and an EA or EIS is not required. If, however, during internal scoping and further investigation, resource effects still remain unknown, or are at the minor to moderate level of intensity, and the potential for significant impacts may be likely, an EA or EIS is required.

In all cases, data collected to determine the appropriate NEPA pathway must be included in the administrative record.

G. INTERDISCIPLINARY TEAM SIGNATORIES

All interdisciplinary team members sign as directed or deemed necessary by the Superintendent. By signing this form, you affirm the following: you have either completed a site visit or are familiar with the specifics of the site; you have consulted with affected agencies and tribes; and you, to the best of your knowledge, have answered the questions posed in the checklist correctly.

H. SUPERVISORY SIGNATORY

Environmental Screening Form (ESF) Soda Butte Creek Native Fish Restoration Project PEPC ID: 58279

Field of Expertise

Project Leader

Todd Koel

Todd Koel 15 July 2015

Field of Expertise

NEPA Specialist

Historic Structures Specialist

Archeologist

Vegetation/Wetlands Specialist

Wildlife Biologist

Technical Specialist

Bianca Klein

Bianca Klein 7/14/15

Zehra Osman

Zehra Osman 7/14/15

Staffan Peterson

Staffan Peterson 7/14/15

Roy Renkin

Roy Renkin 15 July 2015

Daniel Stahler

Daniel Stahler 7/14/15

Based on the environmental impact information contained in the statutory compliance file and in this environmental screening form, environmental documentation for this stage of the subject project is complete.

Recommended:

Compliance Specialist:

NEPA

Bianca Klein

Bianca Klein

Date:

7/14/15

NHPA

Staffan Peterson

Staffan Peterson

Date:

7/14/15



ASSESSMENT OF ACTIONS HAVING AN EFFECT ON HISTORIC PROPERTIES

A. DESCRIPTION OF UNDERTAKING

1. Park: Yellowstone National Park

2. Project Description:

Project Name: Soda Butte Creek Native Fish Restoration Project

Prepared by: Staffan Peterson **Date Prepared:** 04/23/2015 **Telephone:** 307-344-2290

PEPC Project Number: 58279

Locations:

Describe project:

A parkwide Native Fish Conservation Plan was prepared in December 2010. The plan was needed to curtail on-going losses in native fish populations and resultant impacts to the natural food webs they support. Across the park, changing precipitation patterns combined with the lingering effects of historical and illegal stocking of non-native fish continue to result in shifts in ecosystem function. Now, by removing the non-native fish and other non-natural components of the ecosystem, the NPS will strive to restore natural ecosystem components that have been lost or degraded. Yellowstone NP has been working with partner agencies (Montana Fish, Wildlife, and Parks; U.S. Forest Service; and Wyoming Game and Fish) to remove brook trout from Soda Butte Creek for the past two decades. Brook trout removal has been done by electrofishing the upper portions of Soda Butte Creek, above Ice Box Canyon and selectively removing brook trout while returning cutthroat trout back to the stream. Removal of brook trout in Soda Butte Creek by electrofishing was our proposed conservation action described in our Native Fish Conservation Plan EA. Electrofishing is both labor intensive and costly. After two decades of removal effort, brook trout continue to expand their range downstream in Soda Butte Creek. To curtail further expansion of brook trout in Soda Butte Creek, the objective is to remove brook trout by applying a piscicide (rotenone) to remove brook trout from upper portions of the creek above Ice Box Canyon. After treatment, genetically pure Yellowstone cutthroat trout will be stocked into the stream in an effort to secure the population into the future. Yellowstone NP will be working with partner agencies including Montana Fish Wildlife and Parks, U.S. Forest Service, and Wyoming Game and Fish to remove brook trout from the upper reaches of Soda Butte Creek. Montana Fish Wildlife and Parks is currently developing an Environmental Assessment through their Montana Environmental Policy Act (MEPA) process. This project is located in the reaches of Soda Butte Creek and includes all areas of Soda Butte Creek and tributaries above Ice Box Canyon as well as two miles below Ice Box Canyon. An approved piscicide will be used to remove all fish above Ice Box Canyon. Piscicide application will take place during late summer and cover the entire watershed above Ice Box Canyon. Dilute rotenone will be applied via drip stations, backpack sprayers, and a mixture of powdered rotenone and sand. A detox station will be staged upstream of Ice Box Canyon. Potassium permanganate will be used to detoxify the piscicide. Potassium permanganate will temporarily turn the stream a deep purple color. It is anticipated that up to two miles of stream below Ice Box Canyon will be affected by the treatment. It is anticipated that several years of treatment (2-4 yrs) may be necessary to completely eradicate brook trout from upper Soda Butte Creek. Approximately 15 staff from Yellowstone NP and an additional 15 staff from our partner agencies will be involved in the application and detoxification of rotenone in upper Soda Butte Creek.

Details regarding rotenone application and detoxification procedures and analysis of impacts are provided in the Native Fish Conservation Plan/EA. While Soda Butte Creek was not specifically mentioned as a piscicide project the actions described above meet the criteria developed for inclusion under the adaptive management framework for this plan. No wetland statement of findings is required as this project would qualify for an excepted action under "actions designed to restore degraded (or completely lost) wetland, stream, riparian, or other aquatic habitats or ecological process. For this exception "restoration" refers to re-establishing environments in which natural ecological processes can, to the extent practicable, function as they did prior to disturbance."

Area of potential effects (as defined in 36 CFR 800.16[d])

3. Has the area of potential effects been surveyed to identify historic properties?

No
 Yes

4. Potentially Affected Resource(s):

Ethnographic Resources Affected Notes: While Tribes have reported that all of Yellowstone contains ethnographic resources, none specific to the project area have been identified.

5. The proposed action will: (check as many as apply)

- No Destroy, remove, or alter features/elements from a historic structure
- No Replace historic features/elements in kind
- No Add non-historic features/elements to a historic structure
- No Alter or remove features/elements of a historic setting or environment (inc. terrain)
Add non-historic features/elements (inc. visual, audible, or atmospheric) to a historic setting or cultural landscape
- No Disturb, destroy, or make archeological resources inaccessible
- No Disturb, destroy, or make ethnographic resources inaccessible
- No Potentially affect presently unidentified cultural resources
Begin or contribute to deterioration of historic features, terrain, setting, landscape elements, or archeological or ethnographic resources
- No Involve a real property transaction (exchange, sale, or lease of land or structures)
- Other (please specify): _____

6. Supporting Study Data:

(Attach if feasible; if action is in a plan, EA or EIS, give name and project or page number.)

B. REVIEWS BY CULTURAL RESOURCE SPECIALISTS

The park 106 coordinator requested review by the park's cultural resource specialist/advisors as indicated by check-off boxes or as follows:

No Reviews From: Curator, Archeologist, Historical Architect, Historian, 106 Advisor, Other Advisor, Anthropologist, Historical Landscape Architect

C. PARK SECTION 106 COORDINATOR'S REVIEW AND RECOMMENDATIONS

1. Assessment of Effect:

- No Potential to Cause Effects
- No Historic Properties Affected
- No Adverse Effect
- Adverse Effect

3. Additional Consulting Parties Information:

N/A

4. Stipulations and Conditions:

N/A

5. Mitigations/Treatment Measures:

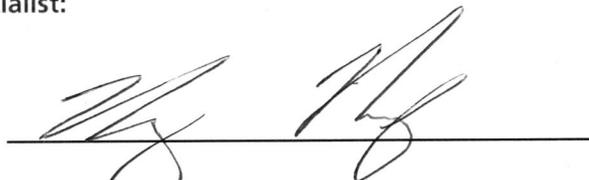
Measures to prevent or minimize loss or impairment of historic/prehistoric properties:
(Remember that setting, location, and use may be relevant.)

No Assessment of Effect mitigations identified.

D. RECOMMENDED BY PARK SECTION 106 COORDINATOR:

Compliance Specialist:

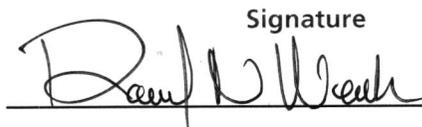
Cultural
Resources Chief
Tobin Roop



Date: 7/14/15

E. SUPERINTENDENT'S APPROVAL

The proposed work conforms to the NPS *Management Policies* and *Cultural Resource Management Guideline*, and I have reviewed and approve the recommendations, stipulations, or conditions noted in Section C of this form.

Superintendent:  Date: 7/14/2015



Other Compliance/Consultations Form

Park Name: Yellowstone National Park
PEPC Project Number: 58279
Project Title: Soda Butte Creek Native Fish Restoration Project
Project Type: Restoration (REST)
Project Location:
County, State: Park, Wyoming
Project Leader: Todd Koel

ESA

Any Federal Species in the project Area? Yes
If species in area: Not Likely to Adversely Affect
Was Biological Assessment prepared? Yes
Sent to FWS: 12/22/2010
FWS Response: 01/18/2011
Sent to NMFS:
NMFS Response:
If Biological Assessment prepared, concurred? Yes
Formal Consultation required? No
Formal Consultation Notes:

Formal Consultation Concluded: 01/18/2011
Any State listed Species in the Project Area?
Consultation Information:
General Notes:

Data Entered By: Daniel Stahler Date: 04/27/2015

ESA Mitigations

Mitigation ID Text

- | | |
|-------|---|
| 49143 | Ensure work crews adhere to bear safety and food storage regulations. |
| 49144 | The project lead will ensure that all project-related employees, such as contract employees, would be given orientation on how to avoid disturbing or encountering bears and how to minimize unavoidable effects or encounters. Orientation would include information about park regulations regarding food storage, disposal of garbage and other bear attractants, and approaching or harassing wildlife. |
| 49146 | Mitigating the impacts to non-target organisms would also be accomplished by collecting and disposing of as many fish carcasses as possible immediately following treatment to avoid |

attraction of bears and other animals to the project area.

Floodplains/Wetlands/§404 Permits

Question	Yes	No	Details
A.1. Is project in 100- or 500-year floodplain or flash flood hazard area?	Y		Exempt from compliance with executive order: Yes Statement of findings approval date:
A.2. Is project in wetlands?	Y		Exempt from compliance with executive order: Yes Statement of findings approval date:
B. COE Section 404 permit needed?		N	Issue Date: Expiration Date: Request Date:
C. State 401 certification?		N	
D. State Section 401 Permit?		N	Issue Date: Expiration Date:
E. Tribal Water Quality Permit?		N	
F. CZM Consistency determination needed?			N/A
G. Erosion & Sediment Control Plan Required?		N	
H. Any other permits required?	Y		Permit Information: Piscicide Application Permit
Other Information:			

Data Entered By: Bianca Klein Date: 04/20/2015

FloodPlains & Wetlands Mitigations

Mitigation ID Text

No FloodPlains & Wetlands mitigations are associated with this project.

Wilderness

Question	Yes	No	
A. Does this project occur in or adjacent to Designated, Recommended, Proposed, Study, Eligible, or Potential Wilderness?	Y		
B. Is the only place to conduct this project in wilderness?	Y		

C. Is the project necessary for the administration of the area as wilderness?	Y		
D. Would the project or any of its alternatives adversely affect (directly or indirectly) Designated, Recommended, Proposed, Study, Eligible, or Potential Wilderness? (If Yes, Minimum Requirements Analysis required)		N	
E. Does the project or any of its alternatives involve the use of any of the Wilderness Act Section 4(c) prohibited uses: commercial enterprise, permanent road, temporary road, motor vehicles, motorized equipment, motorboats, landing of aircraft, mechanical transport, structure, or installation? (If Yes, Minimum Requirements Analysis required)		N	There will be no flights or mechanization within the proposed wilderness areas of the park.
If the answer to D or E above is "Yes" then a Minimum Requirements Analysis is required. Describe the status of this analysis in the column to the right.			Initiation Date: Completed Date: Approved Date:
Other Information:			

Data Entered By: Bianca Klein Date: 04/20/2015

Other Permits/Laws *Questions A & B are no longer used.*

Question	Yes	No
C. Wild and scenic river concerns exist?		N
D. National Trails concerns exist?		N
E. Air Quality consult with State needed?		N
F. Consistent with Architectural Barriers, Rehabilitation, and Americans with Disabilities Acts or not Applicable? (If N/A check Yes)	Y	
G. Other:		

Other Information:

Data Entered By: Bianca Klein Date: 04/20/2015



Response to Public Comments

Project: Soda Butte Creek Native Fish Restoration Project
PEPC ID: 58279

The Soda Butte Creek Native Fish Restoration Project Draft CE was made available for public review May 20, 2015 - June 19, 2015. The park received a total of 56 pieces of correspondence (two of which were duplicates) and the comments were broken down into a total of 85 comments that covered various aspects of the project. The themes below in bold and centered in the page cover the 12 topics related to the substantive comments received.

The majority of commenters were from Montana (39.3%) and Wyoming (23.2%) with a total of 18 states represented. Although public comments do not officially count as a vote, the general consensus on the project is as follows:

- 29 - opposed to the proposed action
- 20 - in support of the proposed action
- 4 - in favor of non-native removal, but not with use of piscicide
- 3 - unable to discern support/opposition or a duplicate entry

Fish hybridization and habitat conditions for macroinvertebrates post-treatment were two of the topics of greatest concern by the public. The following comments/responses address those concerns and others from the substantive comments received:

Yellowstone Cutthroat Trout Genetics

Comment Text: Rather than restocking the stream with YCT from another population, however, I hope YNP & FWP will consider using phenotypical specimens from SBC as their brood source. While the fish are not 100% genetically pure, it is my understanding that they are approximately 99.5% genetically pure. If the best specimens from SBC could be used as brood stock, it would ensure the original population of YCT remains.

Comment Text: I would suggest that all efforts be made to remove the native species prior to treatment and make sure the plan does not have any gaps where a few of the targeted fish could escape treatment.

Comment Text: So this current resident population of 99.5% genetically pure YCT fit the definition of a “core population” because there is less than 1% hybridization. They also represent the historical genome of the subspecies of interest and are considered genetically unaltered. This current population of resident YCT in SBC needs our protection, not annihilation and eradication!

RESPONSE: The State of Montana has proposed to salvage and use the existing slightly hybridized (less than 0.7%), Yellowstone cutthroat trout to restock the creek after treatment. Within Yellowstone

National Park, electrofishing will be used to capture as many of the Yellowstone cutthroat trout from upper Soda Butte Creek as possible prior to the chemical treatment. These salvaged fish will be held outside of the treatment area, but within the Soda Butte drainage (either in tributaries that won't be treated or in hatchery tanks) and reintroduced to upper Soda Butte Creek following completion of the rotenone treatments.

Brook Trout Angling for Eradication Efforts

Comment Text: Why don't they just allow the fishermen open season on all brook trout free without even a fishing license then at least the fish will be used for food and not wasted !

Comment Text: I would suggest that instructing anglers to kill any brook trout caught would a better solution (as it is done with the Rainbow population) or asking volunteers to help with electroshocking or other mechanical methods to reduce cost could be put in place.

RESPONSE: For several years, fishing regulations have allowed unlimited harvest of brook trout and they must be killed if caught in Soda Butte Creek. Angling may be contributing to brook trout suppression, but it is not a viable tool for removing all of these nonnative fish from the stream.

Continued Use of Electrofishing

Concern Statement: Continue to use electrofishing and anglers for selective removal of brook trout in the proposed treatment area.

RESPONSE: Alternative methods have been used to attempt to eradicate brook trout from Soda Butte Creek. Since 2004, the sections of creek upstream of Ice Box Canyon, have been extensively electrofished and angled to remove as many brook trout as possible. These methods have not been successful. As stated in the EA, as well as in the Yellowstone National Park, Native Fish Conservation Plan (FONSI), alternative methods (electrofishing, angling) will likely not be, and to date, have not been effective means for completely eradicating nonnative brook trout in Soda Butte Creek. Because of the size and complexity of habitat in Soda Butte Creek, these tools have been effective in preventing the population from increasing greatly, but not effective in eliminating or preventing downstream migration of brook trout. Electrofishing and angling are also ineffective tools for collecting young-of-year fish. As seen in the Native Fish Conservation Plan/ Environmental Assessment (Table 1), since 2007 brook trout catch numbers have generally been between 100 and 200 per season. Also, within Yellowstone National Park, current fishing regulations are for catch and release of all cutthroat trout, and mandatory removal of all brook trout caught in Soda Butte Creek.

Concrete Barrier Concerns

Comment Text: Another thought for you is families and hikers. Who wants to hike into Yellowstone and miles away from the road come across a concrete barrier. Sure does ruin the idea of wilderness in a preserved national park.

RESPONSE: The action on Soda Butte Creek will not include construction of a concrete barrier.

Wilderness Boundary Concerns

Comment Text: The EA does not mention the agency wilderness recommendation in Yellowstone National Park. While most of Soda Butte Creek appears outside the recommendation as it closely parallels the road, a couple of small tributaries appear to be in the recommendation.

RESPONSE: The action within proposed wilderness areas will not include mechanization. There will be no impacts to wilderness character as a result of this project.

Use of Rotenone in Recommended Wilderness

Comment Text: While brook trout are not natural in this area, their continued existence in Soda Butte is not an overt trammeling of the wilderness as poisoning would be.

RESPONSE: Allowing brook trout to persist in upper Soda Butte Creek and invade downstream waters will eventually result in a loss of cutthroat trout throughout the entire upper Lamar River watershed. The Lamar River backcountry experience includes fishing for genetically unaltered native cutthroat trout. Allowing a loss of the cutthroat trout would be a significant negative impact to wilderness character in Yellowstone National Park. We will eliminate the brook trout from upper Soda Butte Creek now, while it remains feasible to do so. In doing so we will be protecting the native cutthroat trout of the entire Lamar River watershed.

Within the Greater Yellowstone Ecosystem there are several examples of where brook trout were allowed to expand and replace native cutthroat trout. Over the past 10-15 years the cutthroat trout of the upper Sheilds River system in Montana have been largely replaced by brook trout. Similar losses of cutthroat trout to brook trout have occurred in the upper North Fork Shoshone River and the upper Clarks Fork River in Wyoming, these systems are very close, just over the divide from the upper Lamar River and Soda Butte Creek. With these examples in mind, Yellowstone National Park is working with other agencies in order to avoid a watershed-scale loss of cutthroat trout and replacement by brook trout.

Use of rotenone in waters within proposed wilderness of Yellowstone National Park will not impede wilderness character. Instead, it will result in the preservation of a cherished native fish species that forms the base of a natural food web. This natural ecological system will be preserved for future generations as an important part of wilderness within the Lamar River watershed.

Historic Introduction of Brook Trout

Comment Text: Brook trout introduction into the area was considered positive at the time and the current situation is an inadvertent consequence of that action.

RESPONSE: Brook trout were not intentionally introduced to upper Soda Butte Creek in Yellowstone National Park, they are an invasive species that has been spreading downstream threatening native

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ecosystems. The presence of brook trout in Soda Butte Creek has never been considered positive, as agencies have worked for decades to remove them via electrofishing annually. The presence of brook trout in Soda Butte Creek threatens the cutthroat trout of the entire Lamar River watershed. Loss of cutthroat trout at this large scale is a consequence Yellowstone National Park is working to avoid.

Land Use Concerns

Comment Text: Land use, including occupancy, income, values, ownership, income- NO I claim the economic impact on local towns will be significant. The Department of the Interior must provide the analysis that proves their fish restoration plan has no impact on the local economy.

RESPONSE: The State of Montana has proposed to restock the native cutthroat trout to upper Soda Butte Creek immediately following the rotenone treatment. The treatment will have no significant effect on fish populations downstream of the treatment area in lower Soda Butte Creek and the Lamar River. Numerous world-class angling opportunities exist in the northeastern region of Yellowstone National Park. Negligible or minor negative impacts to angling and socioeconomics are expected due to the chemical treatment of upper Soda Butte Creek above Ice Box Canyon.

Rehabilitate Rather than Manipulate Stream Systems

Comment Text: Improve (rehabilitate) habitat to improve food sources, spawning habitat, and give the fishery a boost, instead of treating the stream and creating concrete barriers.

RESPONSE: In many areas across the United States and around the world, loss of habitat is a major component in the decline of fisheries. However, within Yellowstone National Park, and much of the surrounding waters, habitat degradation is not an issue. Many areas in the Park and within the Soda Butte Creek watershed have not been impacted with stream channelization, overgrazing, or other anthropogenic alterations. Soda Butte Creek has been impacted by mining activities upstream of Cooke City, MT at the McClaren Mine. Over the past several years, the mine tailings have been moved out of the floodplain and capped. The NPS conducted intensive monitoring and sample collection during the tailing relocation. In 2013, total and dissolved concentrations for arsenic, copper, selenium, and zinc met standards for drinking water and aquatic life. Dissolved iron concentrations exceeded drinking water (six sample events) and aquatic life standards (two sample events) between January and October 2013. These concentrations are expected to continue to improve over time. Changes to the physical habitat will not accomplish the needed result of removing nonnative brook trout from the Soda Butte Creek system.

Stream Monitoring

Comment Text: Benthic macroinvertebrate (insects: caddis, mayfly, stonefly) populations have not even been determined as far as I can tell. You are to study them just one (1) month prior to poisoning SBC. That is not sufficient as these insects are the primary food source for YCT.

RESPONSE: Inventory and monitoring of stream aquatic invertebrates follow procedures established by Wyoming Department of Environmental Quality. Aquatic macroinvertebrates have been monitored

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annually on Soda Butte Creek since 2002 from the park boundary downstream to the confluence with Lamar River.

Aquatic Insect Recovery

Comment Text: Rotenone is heralded as a selective poison that will only kill fish by paralyzing the gill function. I believe that it will also paralyze the gill function of aquatic insects leaving the re-established cutthroat trout with little or nothing to feed on.

RESPONSE: Recent studies of rotenone concluded that aquatic macroinvertebrate communities recover quickly following repeated treatments at “normal” piscicide doses (≤ 50 ppb rotenone). When normal piscicide doses are exceeded, recovery times for aquatic macroinvertebrates are prolonged. A sound treatment plan will be used on Soda Butte Creek to both effectively remove fish and minimize impacts to aquatic macroinvertebrates. Under the treatment plan for Soda Butte Creek, short-term impacts to aquatic macroinvertebrates would occur, but rapid aquatic macroinvertebrate recovery would be expected and long-term impacts would almost certainly not occur. For more information regarding piscicide use and impacts to non-target organisms, please refer to pages 272-275 of the Native Fish Conservation Plan / Environmental Assessment (2010).

Use of Rotenone in Geothermal Areas

Comment text: How could you possibly know enough about the soda butte water chemistry, combined with the hydrodynamics of the turbulent flow around boulders and slumps in an active geothermal region, to justify assertions of no significant impact?

RESPONSE: Water quality has been collected monthly from upper and lower Soda Butte Creek for over 10 consecutive years. Although geothermal areas do exist along Soda Butte Creek, overall contribution of geothermal waters to overall volume of water in Soda Butte Creek is negligible. Concentrations of both sulfate and chloride (both of which are indicative of geothermal waters) are found in such low concentrations they are recorded as non-detectable. During August, daytime water temperatures typically range from 7-12 °C while pH ranges from 7.5-8.0. Both water temperature and pH are within the limits in which CFT legumine (rotenone) can be effective to remove fish species. The geothermal area which is referred to in the comment as having “hydrogen sulfide gas bubbles“ is located 2 miles downstream of Ice Box Canyon. This area is considered outside the project area since potassium permanganate and rotenone will not have any negative effect on stream communities this far downstream of the potassium permanganate detox station.